MAINTENANCE OF ANTI-ICING/PREWETTING STORAGE & APPLICATION EQUIPMENT WORKSHOP

PRESENTERS:

Jack Gant, Idaho Transportation Department Mykel Wills, Montana DOT

What equipment is being used today?

Jack Gant – ITD uses 10,500 gallon storage tanks
When plumbing tanks, make sure have access to take samples
Include agitation systems (otherwise, additives will settle to bottom)
Plastic components

Mykel Wills –Converted railroad tanker cars used at Missoula site (not the best).

Jack Gant – Getting better material, not having problems as much as before.

Greg Munden, ITD, Coeur d'Alene, ID, described the tanks used at his site, saying he agitates them every Friday. Tanks holding 3,000 gallons or more should have an agitation system. Colder temperatures increase the need to agitate more often.

What application equipment is being used?

Mykel Wills – Montana DOT using Spraytronics – Slip-in units

Jack Gant – Idaho using Monroe, Raven (most popular because of simplicity), Spraytronics, Ag Pro.

Mykel Wills – Combination unit – Montana getting Slide in tanks – anyone know of?

Jack Gant – Pickup-mounted tanks – anyone know of?

Greg L. (Envirotech) – Pickup mounted tanks: one person can load/unload – dry materials needed.

Jack Gant – MgCl₂ dry mix with water – anyone know of?

Greg L. (Envirotech) – Knows of landscapers using it, because they don't have liquid storage capacity or are restricted in size of storage tanks.

Jack Gant – Is secondary containment needed?

Greg Munden – It is required of all new equipment in the Idaho panhandle (Kootenai County) because of being over an aquifer.

What are some common equipment problems that can be handled by the equipment operator and how are they handled?

Mykel Wills – Operators can take nozzles apart and clean them out. Can take care of some wiring problems.

Comment #1: They had bolted 1/4" Teflon sheeting inside sander boxes to prevent corrosion from the MgCl₂ treated sand.

Greg Munden – Flow meters can be rebuilt easily. Use 1/8" plug screen (not fine screen, which can cause clogs).

New product (Envirotech?) – used to dip wiring in – looks promising – seals things up – used to waterproof units. Seal tanks (working on that)? Citrus solvent will remove product, will not work as asphalt release agent.

Jack Gant – Need to put calibration numbers somewhere for next operator of machines.

What are some preventative actions operator can do to prevent problems?

Mykel Wills – Silicon grease is good, helps coat terminals.

Comment #1: Corrosion block product (C-732) – aerosol spray for junction boxes and plug-ins.

Comment #2: Had success with spraying trucks with Rhino Lining so sand didn't stick.

Comment #3 (Calgary): Eight years ago built their own stainless steel sanders. 25-30% more cost for materials.

What changes are needed to improve performance of equipment?

Jack Gant – Simplify computers in application trucks and sanders.

Mykel Wills – Should pass that information along at trade shows.

Is current level of training adequate?

Mykel Wills – More hands-on training needed.

Comment #1: Lack of training aids – same old videos, etc.

Comment #2: Lack of information about application rates for liquid materials causes hesitancy to use them back East.

Greg Munden – Manufacturers need to give better details on how to use products.

Jack Gant – More training needed from manufacturers. Operators also need more training on forecasting weather.

Is your equipment deicer-friendly for storage?

Jack Gant – Try not to have any product left over, flush tanks out.

Mykel Wills – Consider plastic, stainless tanks. Eliminating metal components will help.